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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/772,429

02/06/2004

Tomohiro Kondo

040302-0378

6123

22428 7590 12/07/2007
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EXAMINER

SHAKERI, HADI

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

12/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/772,429	Applicant(s) KONDO ET AL.	
	Examiner Hadi Shakeri	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 and 22-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7,9,10,26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

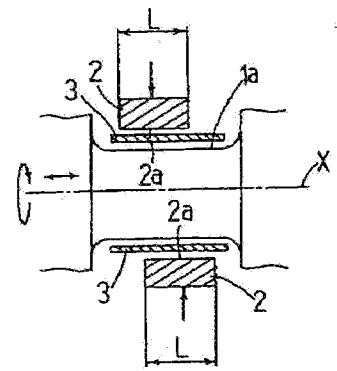
- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3, 4, 6, 7, 9, 10, 26 and 27 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Judge et al. in view of JP Pub. 10-217090.

Judge et al. modified by JP '090 as described in the previous office actions meets all of the limitations of the above claims. With regards to the new limitation, the intended use or desired finish of the workpiece does not further limit the apparatus, however, it is noted that with regards to the method claim, the specific step for achieving the mid-concave profile is adjusting the stroke oscillation and the relative offset, which is met by the combined references or modified reference as applied to the claims in the previous Office actions.



Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

4. Applicant's arguments filed February 27, 2007 have been fully considered but they are not persuasive. Applicant's attention is directed to the response to arguments as presented in the previous Office actions.

Applicant arguments with regards to the "adapted to" language is acknowledged, but is not persuasive. The language is not ignored, but it only limits the apparatus of prior art to be able or capable of performing the function. In this case the adapted to language requires the prior art apparatus to be able to "operatively hold the plurality of shoes on the rear side of the lapping film in different contact areas in a partially overlapping relationship at a central region of the target shaped periphery of the workpiece and in non-overlapping relationship in both terminal regions of the target shaped periphery such that the plurality of shoes are held in opposing offset positions with offset displacement of each of the plurality of shoes set to be less than the given an oscillation stroke provided by the oscillating mechanism", which is met by Judge et al. as modified by JP `090, and the argument that the claim limitations are not met regarding the offset displacement and the stroke oscillation, is not valid since the combined references meet this either as explicitly disclosed by the drawings in JP`090 or adapted to overlap to polish the central region more than the peripheral region (well within the knowledge of one of ordinary skill in the art) as indicated in the previous

Office actions. This limitation was never treated as a design choice. The combine references has the ability to set the stroke oscillation (e.g., different sizes for shoes, JP`090), so assigning any value to this stroke as recited in the instant claims does not and cannot patentably limit the apparatus over another apparatus having the same ability, since the combined references is adapted to or capable of setting such value. The arguments that JP`090 does not show these values are not persuasive. Fig. 1 in Jp`090 appears to disclose a larger oscillation than the offset displacement for the different sizes shoes and Fig. 2 also appear to disclose such arrangements. However as indicated above and in the pervious Office actions, setting these values does not read over the apparatus, e.g., setting a pressure on a polishing shoe different than a shoe polishing pressure in an otherwise similar apparatus, does not patentably distinguish the first apparatus over the other. Here the apparatus of prior art has all of the structures and structural relationships as recited in the claims and is capable or can be adapted to set these values as argued for the oscillation stroke and the offset displacement, thus meets the apparatus claims. With regards to the method claim, again as indicated in the previous Office action, covering a larger overlapped central region for example in achieving higher abrasion for the central region (desired finish) depending on the workpiece and/or operational parameters is considered well within the knowledge of one of ordinary skill in the art. JP`090 discloses in the Abstract that the shoes are asymmetrically arranged to prevent excessive shaving, and that when the work is oscillated the shoes do not completely overlap and the non-overlapped area is only polished by either one of the polishing tapes. To set the boundaries of the area that

is to be polished or shaved by both shoes directly depends on the oscillation stroke and the offset displacement. Thus the argument that setting the offset less than the stroke is patentable over such disclosure is not persuasive, since setting these values would depend on the desired shape of the workpiece. Workpiece having hour glass shapes are desired in the art, and this may be achieved by different ways, e.g., preventing excessive shaving as taught by JP`090 or using correspondingly shaped shoes, as for example disclosed by evidentiary reference Philips (5,722,878) (02:31-34).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, local polishing is taught set by arrangement of the shoes. Asymmetrically arranged shoes are not just limited to Fig. 1, and one of ordinary skill in the art would clearly realize that the arrangement is directly dependent on the desired profile.

The argument that the individual references teaches away from the claimed invention is invalid. The indented result does not teach away from the apparatus claims as rejected. Further pointing out to an exemplary embodiment in a reference to indicate that the reference is teaching away from the claimed invention is not persuasive. It may be true that JP`090 exemplifies straight finish and that Judge discloses the embodiment

for a "barrel" shaped finished workpiece, but the combined references as applied to the method claims (and apparatus claims) modified for the desired mid-concave finish of work surface meets the limitations, since surface of the workpiece may be desired to have a finish in the shape of straight, "barrel" or "hour glass", known in the art by one of ordinary skill as evident by evidentiary reference Phillips.

The argument for lack of reasonable expectation of success is not persuasive, since once the method of Judge is modified by the arrangement of the shoes and stroke, setting the values for desired finish surface (e.g., hour glass), would only require routine experimentations with predictable results.

The request for rejoining the withdrawn claims is acknowledge, but is denied at this time since there are no allowable generic claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is 571-272-4495. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail, III can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 5, 2007

/Hadi Shakeri/
Primary Examiner, Art Unit 3723